Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. *(Currently amended)*

A process for producing a multipurpose, multi-functional apple base which comprises:

(a) washing and sanitizing apples to inactivate residual microorganisms therein;

(b) cutting the apples into suitable sized pieces;

(c) steaming the apple pieces to inactivate enzymes, to gelatinize the protoplasts, to break down the intercellular protopectin and to inactivate microorganisms;

(d) mascerating and screening the steamed apple pieces to produce a mince and to eliminate unwanted skin and core components;

(e) comminuting the apple mince to form a mash with predominantly intact single cells;

(f) separating a portion of the mash of step (e) and homogenizing [[a]] the portion ~~of the mash~~ to fracture ~~the~~ intact, single cells for the production of protoplasmic microparticles, solubilized pectin and size-specific cell wall fragments; and

(g) adding ~~5 to 80% weight mash~~ to the fractured cell homogenate of step (f) 5 to 80% weight apple mash from step (e) to produce the multipurpose, multi-functional apple base.

2. *(Original)*

A process as claimed in claim 1 wherein the washed and sanitized apple pieces are steamed at a temperature between 100 and 110°C to gelatinize the protoplasts, to inactivate the enzymes and to solubilize the protopectin in the middle lamellae to water-dispersible pectin.

3. *(Original)*

A process as claimed in claim 1 wherein the steamed apple pieces are subjected to impaction in a finisher/pulper to produce an apple mince with cellular aggregates and without core, seed and skin components which are removed as waste.

4. *(Original)*

A process as claimed in claim 1 wherein the apple mince is passed through a comminutor with specific screens to produce an apple mash with a predominance of intact single cells by disjoining the aggregated cells upon mechanical impaction,

5. *(Original)*

A process as claimed in claim 1 wherein the apple mash is subject to homogenization at a pressure between 1000 and 5000 psig to bring about the fracture of the intact, single cells to produce a slurry with protoplasmic microparticles, size-specific cell wall fragments and solubilized pectin.

6. *(Original)*

A process as claimed in claim 1 wherein a measured amount of apple mash (5 to 80% weight) is added to the homogenized slurry to produce creaminess, viscosity increase, opacity and apple stability.

7. *(Original)*

A process as claimed in claim 1 wherein gum stabilizers are added to increase the viscosity of the apple base to enhance the stability.

8. *(Original)*

A process as claimed in claim 1 wherein stabilizers selected from the group consisting of pectin and guar gum are added to the mash.

9. *(Original)*

A process as claimed in claim 1 wherein ascorbic acid is added to the apple base to increase the vitamin C content and to keep polyphenolic compounds in a reduced state.

10. *(Currently amended)*

A process as claimed in claim 1 wherein 15 to 50% weight apple mash of step (e) is added to the fractured cell homogenate of step (f).

11. *(Original)*

A process as claimed in claim 3 wherein the finisher/pulper has a screen opening of 0.05 to 0.13 inches (1.5 to 3.35 mm).

12. *(Original)*

A process as claimed in claim 4 wherein the comminutor has screen openings between 0.033 and 0.093 inches (0.85 and 2.36 mm).

13. *(Original)*

A process as claimed in claim 5 wherein the homogenization pressure is between 2000 and 3500 psig.

14. *(New)*

A process for producing a multipurpose, multi-functional apple base which comprises:

(a) washing and sanitizing apples to inactivate residual microorganisms therein;

(b) cutting the apples into suitable sized pieces;

(c) steaming the apple pieces at a temperature between 100 and 110°C to inactivate enzymes, to gelatinize the protoplasts, to break down the intercellular protopectin and to inactivate microorganisms;

(d) mascerating and screening the steamed apple pieces to produce a mince and to eliminate unwanted skin and core components;

(e) comminuting the apple mince in a comminutor which has screen openings between 0.033 and 0.093 inches to form a mash with predominantly intact single cells;

(f) separating a portion of the mash of step (e) and homogenizing the portion at a pressure between 1,000 and 5,000 psig to fracture intact, single cells for the production of protoplasmic microparticles, solubilized pectin and size-specific cell wall fragments; and

(g) adding to the fractured cell homogenate of step (f) 15 to 50% weight apple mash from step (e) to produce the multipurpose, multi-functional apple base.